

-8-

CLAIMS

1. A method of displaying two images in registration with each other comprising the
5 steps of comparing the two images to each other, calculating a transformation which maps features in one image to corresponding features in the other, displaying the two images in superimposition based on the transformation, and displaying a measure of the confidence in the registration.
- 10 2. A method according to claim 1 wherein said measure of confidence is calculated from the degree of transformation required to perform said mapping.
3. A method according to claim 2 wherein said measure of confidence is calculated from the degree of non-rigid deformation in said calculated transformation.
- 15 4. A method according to claim 2 or 3 wherein said measure is calculated excluding rigid motions.
5. A method according to claim 2, 3 or 4 wherein said measure of confidence is
20 calculated from the magnitude of the local deformation in said transformation.
6. A method according to claim 2, 3, 4 or 5 wherein said measure of confidence is calculated from the local change of volume implied by the transformation.
- 25 7. A method according to any one of the preceding claims wherein the measure is selectively displayed in response to user input.
8. A method according to any one of the preceding claims wherein the confidence measure is displayed overlaid on the two images.

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-9-

9. A method according to any one of the preceding claims wherein the measure is displayed as a visually distinguishable overlay on the two images, the visual properties of the overlay at any point being based on the said measure.

5 10. A method according to claim 9 wherein the colour of the visually distinguishable overlay is varied in dependence on said measure.

11. A method according to claim 9 or 10 wherein the intensity of the visually distinguishable overlay is varied in dependence on said measure.

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12. A method according to claim 9 wherein the grey-level of the visually distinguishable overlay is varied in dependence on said measure.

13. A method according to claim 8 wherein the confidence measure is displayed next
15 to the displayed superimposed images.

14. A method according to claim 8, 9 or 13, wherein the visually distinguishable overlay comprises a symbol having a property which depends on the value of said measure at a selected display point.

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15. A method according to claim 14 wherein the symbol is one of a circle and an error bar whose size depends on the value of said measure at a selected display point.

16. A method according to claim 14 or 15 wherein the symbol is displayed at any time
25 only at a single selected display point.

17. A method according to any one of the preceding claims wherein the images are medical images.

30 18. A computer program comprising program code means for executing on a

-10-

programmed computer the method of any one of the preceding claims.

19. A computer-readable storage medium encoding a computer program in accordance with claim 18.

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20. An image display apparatus comprising a display, and an image processor adapted to perform the method of any one of claims 1 to 17.

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